UWIN Utah Wireless Integrated Network

Technology Steering Committee

MEETING MINUTES
Friday, July 9, 2004
Duchesne County Sheriff's Office
10:00 am

Attendance:

Phil Bates (State, DPS)	Ed Spann (Utah, DNR)
Tim Cornia (State, DPS)	Stan Bench (State, DPS)
Rick M. Bailey (San Juan Co)	C.J. O'Brien (Ecutel)
Floyd Ritter (State, ITS)	Scott Mattsen (So. Salt Lake PD)
Boyd Webb (State, ITS)	Glen Murray (Tooele County SO)
Lloyd Johnson (State, DNR)	Randy Auman (Logan City PD)
Doug Chandler (State, ITS)	Jim Speth (Washington County)
Merv Gustin (Duchesne County SO)	Randy Hinton (Washington County)
Jon Tait (Motorola)	Nancy McConnell (State, ITS)
Paul Chavez (UTNG)	*Dave Holm (Cedar City)
Lee Kelley (UTNG)	*Dave Shopay (West Valley City)
Bart Bailey (Washington County SO)	*Steve Whittaker (Salt Lake City)
Ryan Larkin (Washington County SO)	*Jim Woolley (Dell)
Laconna Davis (State, DPS)	*Ed Frazier (Layton City)
Robert Roth (Uintah County SO)	

** Teleconferenced*

I. Approval of Previous Minutes

The minutes for the June meeting were approved without change.

II. OmniLink Voice Interoperability Project

Phil Bates (State DPS) gave an update of the OmniLink project. The system consists of two components. The first is the Ambassador Audio switch that basically connects the consoles together. The next portion is the actual software component. All of the equipment has arrived. Additional dispatch centers are being connected in the next 60 days. The National Guard exercise in Millard was highly successful. At one point, a lightning strike took out a component in the Millard County console. The State EOC was able to take over and control the severed radio asset until repairs could be made.

A question was asked about policies and procedures for which dispatch center would act as the 'back-up' for a dispatch center that need it. Phil said these issues need to be addressed by getting the dispatch centers together and discussing the issue. The goal is to have the rest of the state regional dispatch centers connected in the next 60 days. The next step is to get all of the UCAN infrastructure onto the new equipment; that should take from about Oct through the first of next year.

III. UWIN Glossary

Doug Chandler has submitted a Wireless Glossary page to the web group for posting on the UWIN Web site. This will help readers of the web site who run across terms that they don't understand. Look for the new Glossary to be posted soon. This will include educational diagrams and links as necessary.

IV. 700MHz Mobile Data Project

Forrest Roper (Mobile Data Project Team Leader) was not able to attend the meeting. Doug asked Floyd Ritter to give an update.

Floyd reported that Phase One equipment has been ordered. The radio equipment should arrive mid-August. Phase One includes Millard County on the I-15 corridor down through Washington County, and also includes the Daggett, Duchesne and Uintah areas. Phase Two will include the upgrade of the 450MHz equipment now in the Cache, Tooele, and Park City areas, to 700MHz. Site equipment (antennas, racks, power supplies, filters, etc) is already being received so we can get mountaintop location ready for the radio equipment when it arrives.

The UHP has already ordered 200 mobile units. There are approximately 120 units now on 450MHz, Duchesne has already ordered 91 units, and there is a grant application in the works for another 200 UHP units (That means there will be between 411 and 611 units operating on the system within the next year –assuming no other agencies join in.) and enough base station equipment to cover the Wasatch Front and possibly I-70 down through Moab.

Sheriff Gustin asked if IPMobileNet received the necessary type-acceptance for manufacturing equipment to operate on the new 700MHz spectrum. Floyd didn't know, but pointed out that IPMobileNet has an obligation to deliver on their promised delivery date.

Doug was asked to speak on rates. There is no rate being proposed yet. The rate will be based on what it takes to maintain the system. The state will keep the rates as low as reasonably possible.

Glen Murray (Tooele County) mentioned that his area (and possible others now on 450MHz) has a problem as they need to purchase more mobile units. IPMobileNet has agreed to upgrade the *current* 450MHz radios to 700MHz, but that doesn't necessarily cover any new 450MHz units. They have grant money that needs to be spent ASAP, so waiting for the conversion to 700MHz in Phase Two is a difficult situation. The state will move as fast as possible to make the conversion happen. The difficulty is that we wanted to wait to see how the new 700MHz equipment performs before we upgrade the 450MHz. Doug said the state might ask for help from participating agencies to help with short installation time constraints. Glen pointed out that IPMobileNet might be willing to work with agencies to deliver 450MHz now and swap later.

V. Narrowband Migration Project

Boyd Webb is the Project Leader for Narrowband Migration. Information on the Narrowband Project can be found on the UWIN Web site:
http://uwin.utah.gov/techcommittee/techcommittee.html
or the YahooGroup Web site: http://groups.yahoo.com/group/UWIN-NarrowbandTeam/
Boyd's phone number is: (801) 965-3857.
The next meeting of the Narrowband Migration Project Team is July 15. It will be held on-line in the chat room at the above listed YahooGroup.

Narrowbanding basically refers to the VHF spectrum. UHF has already been channelized. VHF (150-174) is "kinda the wild-wild west." Channels are not paired off, so frequencies are put together all over the spectrum. Bob Marz used to be the coordinator for all public safety

frequencies in Utah. About 15 years ago, Bob started trying to ensure all new repeater transmits ended up on the 151MHz region, and the repeater receives on the 159Mhz end of the spectrum. This was a good move because it will help us move to the next level of a more coordinated spectrum. There are now effectively three functional "regions" of public safety spectrum:
Region One 150-151
Region Two 153-157
Region Three 158-159
There are just under 1500 public safety frequencies licensed in Utah. There are 100 repeater transmits in Region One. There are 200 repeater receives in Region Three. Virtually all of the rest of the 1500 frequencies are in Region Two. There is only one repeater receive in Region One in the entire state. Region Three has 22 repeater transmits. We're only looking at changing 23 frequencies to clean up Regions One and Three. Region Two is the real problem. There are a couple of ways Region Two could be 'fixed'.

One plan suggests that we move all of the repeater transmits into Region Two, leaving Regions One and Three for Repeater Receives. This is the best plan on paper, but will be harder to get to (a lot of re-licensing). There may be a compromise between what is best vs what is the easiest. Boyd urged participation on the Narrowband Team, and asked Floyd Ritter to give a brief presentation on what's going on at the national level with VHF narrowbanding.

Floyd Ritter sits on the National Public Safety Telecommunications Council (NPSTC), Narrowbanding subcommittee. Floyd reported that in metropolitan areas such as California, "greenspace" (temporary spectrum to allow for moving existing channels around) is being requested/required because there are simply no VHF channels left in such areas. The subcommittee pleaded with the NTIA for more frequencies. The response was basically 'not only no but….'. Yet in a recent plan from the President Bush's office, it was announced that the NTIA would be giving up 10MHz of spectrum to the FCC for this operation. Several states are implementing VHF trunking systems and without a good channel pairing, these systems will be hindered.

Boyd pointed out that this issue will affect everyone, and it's better to address this issue up front rather than wait for the FCC to force decisions that we are not operationally or financially ready for. The FCC is licensing narrowband designations now. If a coordinator licenses someone narrowband in one of your existing wideband channels, you automatically become a secondary user (you must shut down your operation if it adversely affects the new narrowband user).

VI. Wireless Ethernet Project Team Update

Tim Cornia is the Project Leader. Tim had an emergency meeting yesterday. The ITS Infrastructure Wireless LAN/WAN Security Policy written by Michael Allred, was reviewed and comments were given. Tim noted that security people tend to want to shut off as much access as possible, while LAN people tend to want little to no security at all. Tim gave info on the Web sites:
UWIN Web Site (Wireless Ethernet section):
http://uwin.utah.gov/techcommittee/techcommittee.html
YahooGroup: http://groups.yahoo.com/group/UWIN_80211_workgroup/

One of the things that got several people stirred up was the effective date of the policy was July 1, 2004. Nancy McConnell pointed out that the document was still a draft. There was an erroneous assumption that the document was being presented to IT directors in order to "railroad" a policy through. This was not the case. The policy was presented for feedback and not for ratification. Tim thought the UCAN TSC Wireless Ethernet Project Team was the best place to have the document reviewed. In the meeting on Thursday, it became readily apparent that the document needed a lot of re-work –if not a total re-write. Lloyd Johnson with State DNR was told by ITS that input was not yet required by outside agencies. Another issue with the security policy was authentication. If everyone is required to authenticate through a central location, agencies would not be able to manage their own resources.

Tim has posted the relevant documents and is asking for feedback. The idea is to not just have negative comments, but positive feedback that will help form a better document/policy. Do we even need a separate security policy? Is having a higher security policy for 'wireless' vs 'wired', have we actually gained anything? What is the cost going to be –and what are we all willing to pay? Are we securing the data or the communications? Is W.E.P. too low (yes)? ITS has decided on P.E.A.P. because they claim it is an industry standard, but others in this group know that it's not (Windows and Cisco don't even agree on what PEAP is).

Tim gave a brief update on 4.9 GHz equipment. The Region 41 plan has been submitted, but will probably be set aside as most states request an extension. Point-Point devices are available now, but Access Point-type devices are not.

Tim was asked to bring back a new 802.11 document for the next UWIN meeting. Tim will keep all relevant documents available on the web site.

VII. UWIN Phase Two

The UWIN Governance Board asked for the help of the Technology Steering Committee in defining what should be included in UWIN Phase Two. The time frame for completion of Phase Two is Dec 31, 2004. Here is what was put together by way of recommendation to the Governance Board:

- **OmniLink Policy and Procedures**
  - Define which dispatch centers act as "back-up" to others
  - Patching/Monitoring Policy
  - Identify growth and long-term funding
  - Identify 800MHz conventional deployment
  - Colorado BIM-BIM connection
- **Alterate Internet Connection Plan (with UEN)**

- **700MHz Mobile Data**
  - **Policies and procedures**
  - **Address rates**
  - **UHF conversion to 700MHz**
  - **Applications**
  - **Have successful implementation prior to future growth**

- **Training – All projects; fur users and technical staff alike (Web Based?)**
- **Narrowband Plan to Governance Board for approval**
- **Final plan for 802.11 to Governance Board**
- **Finalize Region 41 700Mhz Plan and submit to FCC**
- **Address network persistence issues**

VIII. Vendor Presentations

C.J. Obrien with Ecutel presented their Viatores solution.
[State Contract: AR1793]

Erik Helms with Net Motient presented their Mobility solution.
[State Contract: AR1794]

IX. Next Meeting

Dave Holms with the Cedar City PD has made arrangements for the next meeting:
Cedar City
Heritage Center, Room 1
105 N. 100 E.
(Enter via 2nd level of parking structure)
Phone Bridge: 1-877-581-9247 Code: 604370

http://uwin.utah.gov